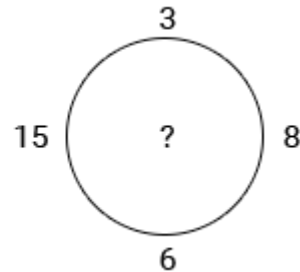
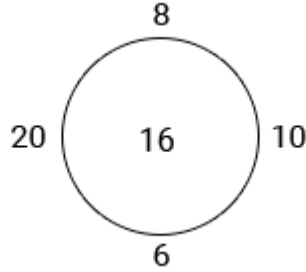
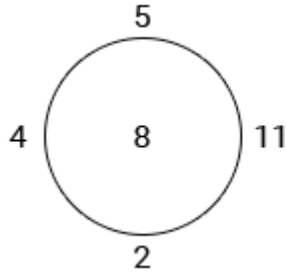
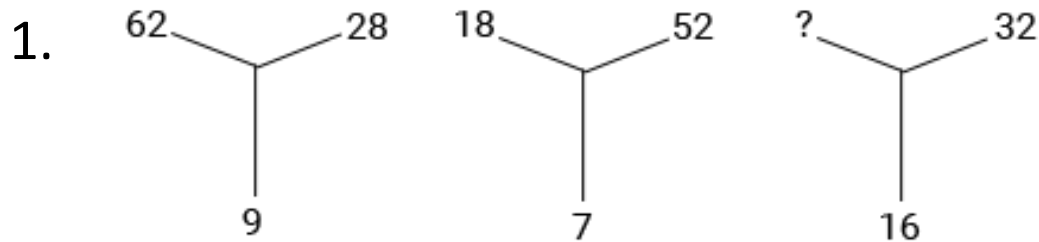


Inserting the missing character





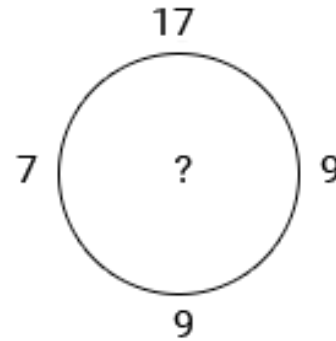
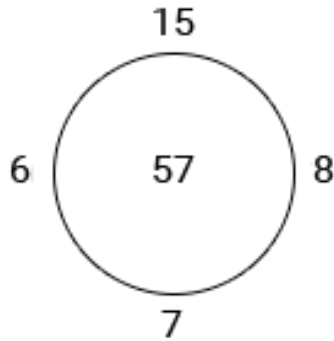
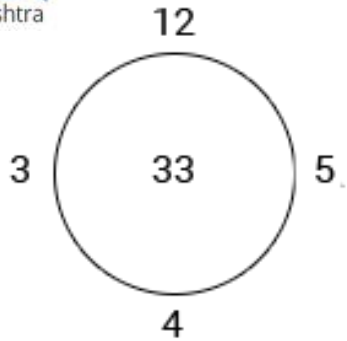
- (a) 105 (b) 142 (c) 128 (d) 118

Explanation: The pattern is : $(62+28)/10 = 9$; $(18+52)/10 = 7$.

So, missing number = $(x + 32)/10 = 16$,

X = 128

2.



(a) 80

(b) 90

(c) 72

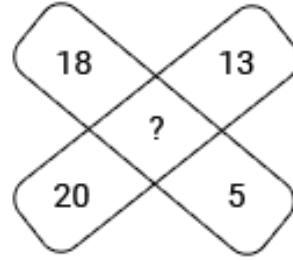
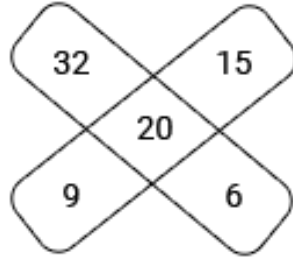
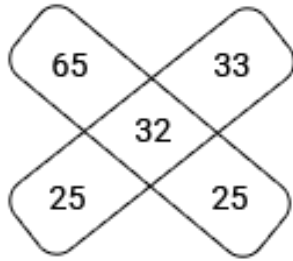
(d) 64

Explanation: The pattern is: $(12 \times 4) - (5 \times 3) = 33$,

$(15 \times 7) - (8 \times 6) = 57$.

\therefore Missing number = $(17 \times 9) - (9 \times 7) = 90$.

3.



(a) 18

(b) 20

(c) 23

(d) 25

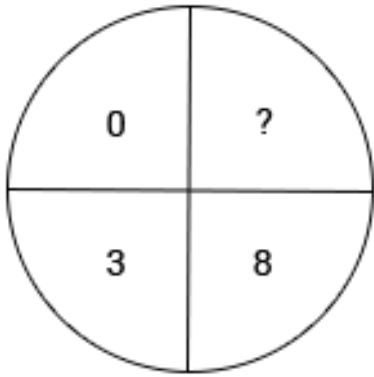
Explanation: The pattern is: $(65+25) - (33+25) = 32$,

$(32+9) - (15+6) = 20$.

So, missing number = $(18+20) - (13+5) = \mathbf{20}$.

So answer is **option b**.

4.



(a) 27

(b) 15

(c) 30

(d) 63

Explanation: Going anticlockwise starting from 0, the terms are :

$1^2 - 1$, $2^2 - 1$, $3^2 - 1$.

So, missing number = $4^2 - 1 = 15$.

So answer is **option b**.

5.

17	16	15
52	39	26
29	44	59
37	?	45

(a) 41

(b) 43

(c) 31

(d) 40

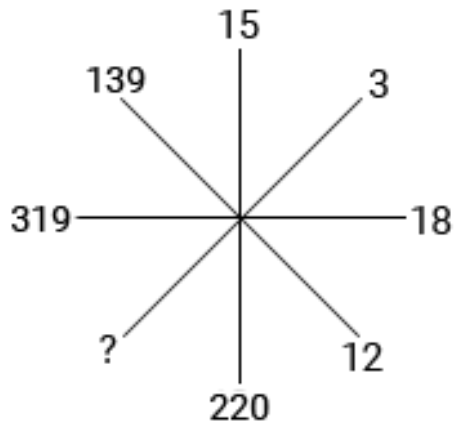
Explanation: In the each row middle term is average of extreme terms

$$(17+15)/2 = 16, (52 + 26)/2 = 39.$$

$$\text{So, missing number} = (37+45)/2 = \mathbf{41}.$$

Hence, the answer is **option a.**

6.



(a) 8

(b) 9

(c) 4

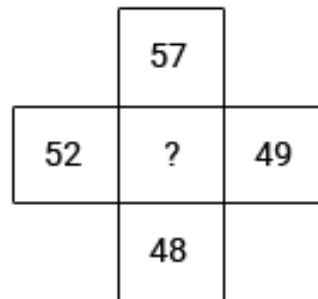
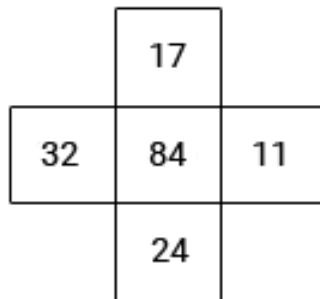
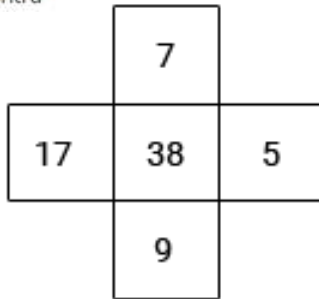
(d) 25

Explanation: The two ends of each line contain a number and its square -5. e.g. $15^2 - 5 = 220$, $18^2 - 5 = 319$.

So, missing number $= 3^2 - 5 = 4$.

So answer is **option c**.

7.



(a) 70

(b) 206

(c) 106

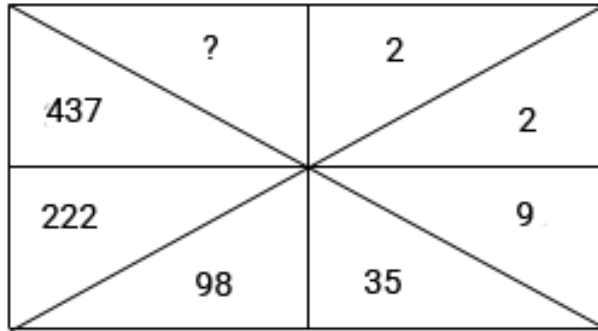
(d) 100

Explanation: The pattern is middle number is sum of extreme terms.

So, missing number = $52 + 48 + 49 + 57 = 206$.

So the answer is **option b**.

8.



(a) 832

(b) 777

(c) 245

(d) 779

Explanation: By going in clockwise direction we find the following pattern

$$2 + 1^3 - 1 = 2;$$

$$2 + 2^3 - 1 = 9;$$

$$9 + 3^3 - 1 = 35$$

$$35 + 4^3 - 1 = 98;$$

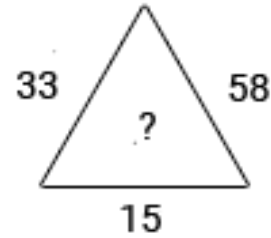
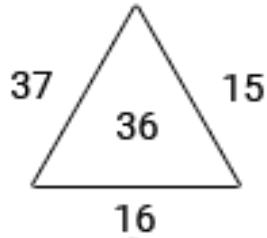
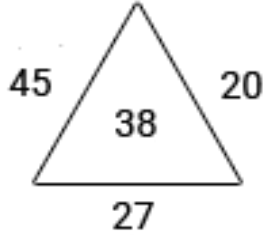
$$98 + 5^3 - 1 = 222;$$

$$222 + 6^3 - 1 = 437$$

$$\text{and } 437 + 7^3 - 1 = \mathbf{779}$$

Hence, the answer is **option d.**

9.



(a) 76

(b) 66

(c) 86

(d) 56

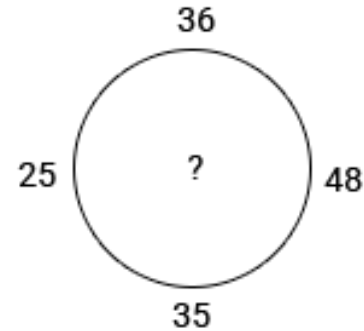
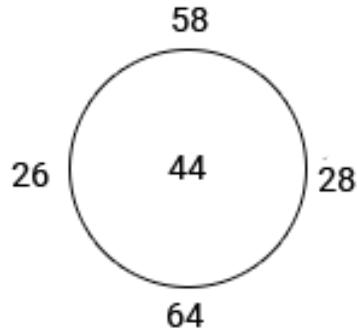
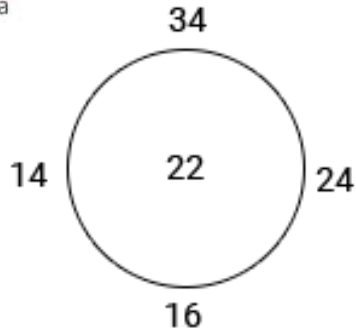
Explanation: The pattern is as follows

$$45 + 20 - 27 = 38; \quad 37 + 15 - 16 = 36;$$

$$\text{so } 33 + 58 - 15 = \mathbf{76}$$

so answer is **option a.**

10.



(a) 36

(b) 66

(c) 24

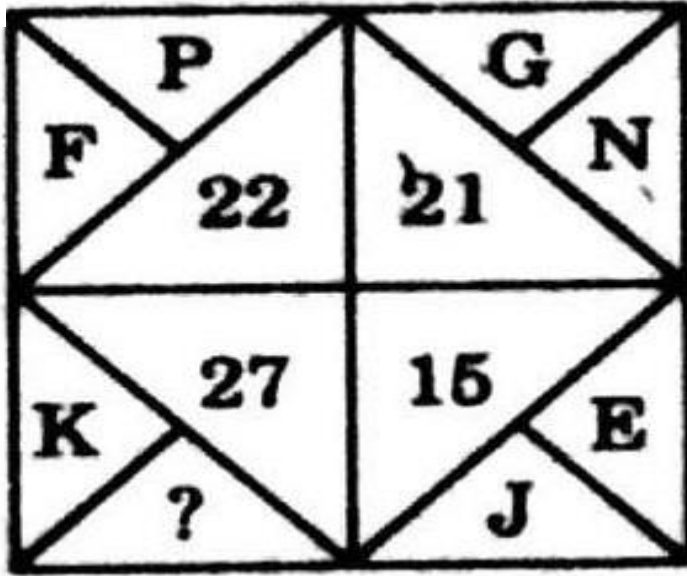
(d) 28

Explanation: The pattern is: number in the circle is average of numbers outside the circles.

So missing number is $(25 + 36 + 48 + 35)/4 = 36$

so answer is **option a.**

11.



- (a) M (b) P (c) Q (d) S

Solution

$$F + P = 6 + 16 = 22;$$

$$G + N = 7 + 14 = 21;$$

$$J + E = 10 + 5 = 15.$$

Since $K = 11$, so value corresponding to missing letter
 $= (27 - 11) = 16.$

So, the missing letter is the 16th letter of the English alphabet, which is **P**.

Hence, the **answer is (b).**

12.

1	2	3
4	5	6
7	8	9
27	38	?

(a) 49

(b) 50

(c) 51

(d) 52

Solution

In the second column, $(5 \times 8) - 2 = 48$.

So, missing number = $(6 \times 9) - 3 = (54 - 3) = 51$.

Hence, the **answer is (C)**

13.

1	4	9	?
1	2	3	4
2	4	6	?

(a) 16,8

(b) 49,7

(c) 36,4

(d) 25,5

Explanation: Answer: A) 16,8

The numbers in the first row form a series $1^2, 2^2, 3^2$.

So, missing number in the first row = $4^2 = 16$.

The number in the second row from the series, 1, 2, 3, 4.

The number in the third row from the series 2, 4, 6.

So, missing number in the third row = $6 + 2 = 8$.